STORMWATER MANAGEMENT ORDINANCE



CULPEPER COUNTY VIRGINIA

Chapter 11A

STORMWATER MANAGEMENT

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ARTICLE 1. IN GENERAL

DIVISION 1. GENERAL PROVISIONS

Sec. 11A-1. Statutory Authority.

This chapter is adopted pursuant to the authority conferred by the Virginia Stormwater Management Act [Article 1.1 (§10.1-603.1 et seq.) of Chapter 6 of Title 10.1 of the Code of Virginia].

Sec. 11A-2. Purpose.

The purpose of this chapter is to establish minimum stormwater management requirements and controls to protect properties; safeguard the general health, safety, and welfare of the public residing in watersheds within Culpeper County; and to protect aquatic resources. This chapter seeks to meet the preceding purpose through the following objectives:

- (a) Requirement that land development and land conversion activities maintain the after-development characteristics, as nearly as practicable, to the pre-development characteristics in order to reduce flooding, siltation, stream bank erosion, and property damage;
- (b) Establishment of minimum design criteria for the protection of properties and aquatic resources, downstream from land development and land conversion activities, from damages due to increases in volume, velocity, frequency, duration, and peak flow rate of storm water runoff;
- (c) Establishment of minimum design criteria for measures to minimize non-point source pollution from stormwater runoff which would otherwise degrade water quality;
- (d) Promotion of low-impact development (LID) techniques complimented by the use of conventional stormwater management;
- (e) Establishment of provisions for the long-term responsibility for and maintenance of stormwater management control devices and other techniques specified to manage the quality and quantity of runoff; and
- (f) Establishment of certain administrative procedures for the submission, review, approval, and disapproval of stormwater plans, and the inspection of approved projects.

Sec. 11A-3. Applicability.

- (a) Except as provided for in §11A-3(b) and Article II of this chapter, all land development projects shall comply with the requirements of this chapter. To prevent the adverse impacts of stormwater runoff, the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, has developed a set of performance standards that must be met on new development or redevelopment sites. These standards apply to any land development or land use conversion activity disturbing one acre or more of land.
 - (b) The following activities are exempt from these stormwater performance criteria:
 - (1) Clearing of lands specifically for agricultural purposes including the management, tilling, planting, or harvesting of agricultural, horticultural, or silvicultural crops;
 - (2) Single-family residences separately built and disturbing less than one acre including additions or modifications to existing single-family detached residential structures;

- (3) Land development projects that disturb less than one acre of land area;
- (4) Linear development projects, provided that: (i) less than one acre of land will be disturbed per outfall or watershed; (ii) there will be insignificant increases in peak flow rates, and (iii) there is no existing or anticipated flooding or erosion problems downstream of the discharge point.
- (c) When a site development plan is submitted that qualifies as a redevelopment project as defined in §11A-7 of this chapter, decisions on permitting and on-site stormwater requirements shall be governed by the stormwater sizing criteria found in the current Virginia Stormwater Management Handbook and Culpeper County adopted LID manuals. This criterion is dependent on the amount of impervious area created by the redevelopment and its impact on water quality. Final authorization of all redevelopment projects will be determined after review by the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies.

Sec. 11A-4. Compatibility with other permit and ordinance requirements.

This chapter is not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of this chapter should be considered minimum requirements, and where any provision of this chapter imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

Sec. 11A-5. Severability.

If provisions of any article, section, subsection, paragraph, subdivision or clause of this chapter shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this chapter.

Sec. 11A-6. Stormwater management handbook.

The Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, will utilize the policy, criteria, and information including specification and standards of the Virginia Stormwater Management Handbook, for the proper implementation of the requirements of this chapter. The Handbook is a list of acceptable stormwater treatment practices, including the specific design criteria for each stormwater practice. Design and construction in accordance with updates to the Handbook, regarding improvements in technology, engineering, science, monitoring, and local maintenance, will be presumed to meet the minimum water quality performance standards required by this chapter.

DIVISION 2. DEFINITIONS

Sec. 11A-7. Terms and words defined.

For the purposes of this chapter, certain terms and words used herein shall be interpreted as follows:

1.5 year storm: The frequency of a storm and the probability of such a storm occurring based on history. A one and half year storm means based on historic data the probability of the event occurring in any given year is 1 in 1.5 or roughly a 66% chance.

2 year storm: The frequency of a storm and the probability of occurrence based on historic data. A two year storm means the probability of the event occurring in any given year is 1 in 2 or a 50% chance.

10 year storm: The frequency of a storm and the probability of occurrence based on historic data. A ten year storm means the probability of the event occurring in any given year is 1 in 10 or a 10% chance.

100 yr storm: The frequency of a storm and the probability of occurrence based on historic data. A 100 year storm means that the probability of the event occurring in any given year is 1 in 100 or a 1 % chance.

24 hour storm: The duration of a storm. A twenty four hour storm is a storm that lasts for 24 hours.

Agreement in lieu of a plan: A contract between the plan-approving authority and the landowner.

Agricultural: The keeping of agricultural animals, livestock, grazing, and the tilling of the soil, the raising of crops, horticulture, forestry, and including the keeping and the processing of any products produced on the premises, such as milk, eggs, and the like; but excluding any industry or business such as fruit packing plants or similar uses where all products processed are not produced on said premise.

As-Built Checklist: A guideline for preparing as-built drawings.

Average land cover: A measure of the average amount of impervious surfaces within a watershed, assumed to be 16%.

Base flow: Flow in a channel due to soil moisture or ground water.

Best management practice (BMP): A structural or nonstructural practice which is designed to minimize the impacts of development on surface and groundwater systems.

Buffers: An area of land at or near a tributary streambank and/or wetland that has intrinsic water quality value due to the ecological and biological processes it performs or is otherwise sensitive to changes which may result in significant degradation to the quality of state waters.

Channel: A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Deposition: sediment build up in a stream channel.

Detention basin: The temporary storage of stormwater runoff in a stormwater management structure with the goals of controlling peak discharge rates and providing gravity settling of pollutants.

Discharge: The peak flow of a particular pollutant measured in cubic feet per second.

Drainage easement: A legal right granted by a landowner to a grantee allowing the use of private land for stormwater management purposes.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Erosion: Removal of soil particles by wind and/or water. Often the eroded debris (silt or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally but can be intensified by human activities such as farming, development, road-building, and timber harvesting.

Extended detention basin: A stormwater management facility which temporarily impounds runoff and discharges it through a hydraulic outlet structure over a specified period of time to a downstream conveyance system for the purpose of water quality enhancement or stream channel erosion control. While a certain amount of outflow may also occur via infiltration through the surrounding soil, such amounts are negligible when compared to the outlet structure discharge rates and, therefore, are not considered in the facility's design. Since an extended detention basin impounds runoff only temporarily, it is normally dry during non-rainfall periods.

Facility: A device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release, and the velocity of flow.

Flooding: A volume of water that is too great to be confined within the banks or walls of a stream, water body, or conveyance system and that overflows onto adjacent lands, causing or threatening damage.

Floodplain: Land which would be inundated by flood waters in a storm event of a one-hundred (100) year return interval.

Forested condition: Mature, healthy forest land condition.

Fractured bed rock: Exposed bed rock that is connected to aquifer marked by pocked topography and underground cavities.

Geotechnical investigation: On site soil conditions inspected and reported by a trained professional.

Grassed swale: An earthen conveyance system which is broad and shallow with erosion resistant grasses and check dams, engineered to remove pollutants from stormwater runoff by filtration through grass and infiltration into the soil.

Hotspot: An area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

Hydrology: All bodies of water and their connectivity.

Infiltration: The process of percolating stormwater into the subsoil.

Integrated management practices: Low-impact development microscale and distributed-management techniques to maintain predevelopment site hydrology. Integrated management practices shall include bioretention facilities, dry wells, filter/buffer strips, grassed swales, rain barrels, cisterns, infiltration trenches, and amended soils as specified in low-impact development design manuals.

Intermittent stream: A natural stream or portion of a natural stream that has a defined bed and defined banks within which water flows in response to precipitation, through near surface groundwater flow, or from springs, and which is not a perennial stream.

Land cover: A vegetative condition of a parcel. Vegetative condition is associated with a specified curve number used to calculate runoff pollution.

Land development: The development or alteration of land which changes its purpose from preexisting conditions.

Land disturbance activity: Any activity which changes the volume or peak flow discharge rate of rainfall from the land surface. This may include the grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving construction, substantial removal of vegetation, or any activity which bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.

Land use conversion: The official changing of the permitted land use to a new permitted land use; the result of a rezoning.

LID Natural Resource Assessment: Analysis or evaluation of on site natural features, prior to development, for use in development of stormwater management concept plans; to include a site visit, checklist, and a summary or narrative.

Linear development project: A land development that is linear in nature such as, but not limited to: (i) the construction of electric and telephone utility lines and natural gas pipelines; (ii) the construction of tracks, right-of-ways, private roads, bridges, communication facilities, and other related structures of a railroad company, (iii) highway construction projects, (iv) driveways.

Lot: A tract, plot, portion of a subdivision, or other parcel of land intended as a unit for the purpose, whether immediate or future, of transfer of ownership or for development.

Low-impact development (LID): An approach to site design and stormwater that seeks to maintain the site's predevelopment rates and volumes of runoff. LID accomplishes this through the minimization of impervious cover, strategic placement of buildings, pavement and landscaping, and the use of small-scale distributed management features collectively call "Integrated Management Practices" (IMPs).

Low-impact development manuals: Culpeper County adopted manuals, as incorporated by reference in this chapter.

National pollutant discharge elimination system (NPDES): A regulatory amendment made in 1987 to the Clean Water Act (1972) that requires a discharge permit for large city stormwater discharges, essentially treating them as point sources.

Non-tidal wetlands: Wetlands other than tidal wetlands that are inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the United States Environmental Protection Agency.

Parcel: see lot.

Parking lot: An area not within a building where licensed and operable motor vehicles may be stored for the purpose of temporary, daily or overnight off-street parking.

Peak discharge: The maximum volumetric flow rate passing a particular location during a storm event.

Peak flow: Maximum flow, at which time the water flow elevation is highest and flooding is the worst.

Percent impervious: The impervious area within the site divided by the area of the site multiplied by 100.

Perennial streams: Streams which typically run year round and are depicted as a continuous blue line on the most recent United States Geological Survey 7.5 minute topographic quadrangle map(scale 1:24,000), except for streams within a development area or area of infill and redevelopment that have been piped or converted legally and intentionally into stormwater conveyance channels such that the stream does not resemble or maintain the characteristics of a natural stream channel, as determined by the program authority.

Point of discharge: The geographic point of analysis to which runoff from a particular area of land is conveyed.

Pollutant load: The amount of pollutants running off the land. In Virginia pollutant load is based on the amount phosphorus, but can refer to other pollutants as well such as nitrogen.

Post-development: Conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land.

Pre-development: Conditions that exist at the time that plans for the land development of a tract of land are approved by the plan approving authority. Where phased development of plan approval occurs (preliminary grading, roads, utilities, etc.), the existing conditions at the time *prior to* the first time being approved or permitted shall establish pre-development conditions.

Recharge: The replenishment of underground water reserves.

Redevelopment project: A project that involves the process of developing land that is or has been previously developed.

Retention basin: A stormwater management facility that temporarily impounds runoff and discharges it through a hydraulic outlet structure to a downstream conveyance system, and also includes a permanent impoundment. Therefore, it is normally wet, even during non-rainfall periods.

Sediment deposition: The process of water creating a sediment deposit, through the laying down of granular material that has been eroded and transported from another geographical location.

Stream buffer: An area of land at or near a tributary stream bank and/or non-tidal wetland that has an intrinsic water quality value due to the ecological and biological processes it performs or is otherwise sensitive to changes which may result in significant degradation to the quality of state waters.

Site: The parcel of land being developed or designated planning area in which the land development project is located.

Stormwater drainage system: An engineered man-made or natural system that transports stormwater through an area, site, and/or drainage area.

Stormwater (management) impoundment structures: See facility.

Stormwater management design manuals: Virginia Stormwater Management Handbook and Culpeper County approved Low Impact Development Manual.

Stormwater management concept plan: A document containing preliminary material and narrative for describing how existing runoff characteristics will be affected by a land development project, and methods for complying with the requirements of this ordinance.

Stormwater management design plan: A document containing narrative information and computational analysis for describing how existing runoff characteristics will be affected by a land development project, and methods for complying with the requirements of this ordinance.

Stormwater runoff: Water originating from rainfall and other precipitation that ultimately flows into drainage facilities, rivers, streams, springs, seeps, ponds, lakes, and wetlands as well as shallow groundwater.

Stream impact: The effect of land use change on the local aquatic system.

Structure: See facility.

Surface water: Water other than groundwater, such as lakes, rivers, or streams.

Virginia Stormwater Management Act: Article 1.1 (§10.1-603.1 et seq.) of Chapter 6 of Title 10.1 of the Code of Virginia.

Virginia Stormwater Management Permit: A statement of the various methods employed by a locality to manage the runoff from land development projects and may include such items as local ordinances, policies and guidelines, technical materials, inspection, enforcement, and evaluation.

Virginia Stormwater Management Program (VSMP): The Virginia program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing requirements pursuant to the federal Clean Water Act, the Virginia Stormwater Management Act, the Virginia Stormwater Management Program (VSMP) Regulations, and associated guidance documents.

Virginia Stormwater Management Program (VSMP) Permit Regulations: Chapter 60 (4VAC50-60) of the Virginia Administrative Code.

Vegetative filter strip: A densely vegetated Article of land engineered to accept runoff as overland sheet flow from upstream development. It shall adopt any natural vegetated form, from grassy meadow to small forest. The vegetative cover facilitates pollutant removal through filtration, sediment deposition, infiltration and absorption, and is dedicated for that purpose.

Water quality volume: The volume equal to the first ½ inch of runoff multiplied by the impervious surface of the land development project.

Watershed: A defined land area drained by a river, stream, or drainage ways or system of connecting rivers, streams, or drainage ways such that all surface water within the area flows through a single outlet.

Wetlands: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Zoning Administrator: The Culpeper County Zoning Administrator or his designee, including, but not limited to, the County's certified Erosion and Sediment Control Program Administrator.

ARTICLE II. EXCEPTIONS

Sec. 11A-8. Generally.

Exceptions to the provisions of this chapter may be granted by the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, upon receipt of request for such exception in writing from the applicant or property owner. The request shall include descriptions, drawings, calculations, and other information that is necessary to evaluate the waiver of stormwater management requirements. An exception may be granted provided that:

- (a) Exceptions to the criteria are the minimum necessary to afford relief;
- (b) Economic hardship alone is not sufficient reason to grant an exception;
- (c) Reasonable and appropriate conditions shall be imposed as necessary upon an exception granted so the intent of the chapter is preserved.

Sec. 11A-9. Low-impact development exceptions.

LID shall be considered prior to conventional stormwater management. An exception to implement LID may be granted provided that the stormwater management concept plan shall utilize, to the maximum extent practicable, low-impact development site planning in accordance with the low-impact development design manuals and calculation sheets. The maximum extent practicable may be determined in a LID Natural Resource Assessment meeting with the Culpeper County Planning Department, and/or the Culpeper Soil and Water Conservation District. The LID Natural Resource Assessment may be used to determine whether additional stream protection is appropriate.

Sec. 11A-10. Stormwater management requirement exceptions.

- (a) The minimum requirements for stormwater management may be waived in whole or part provided at least one of the following conditions applies:
 - (1) It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this chapter;
 - (2) The County finds that meeting the minimum on-site requirements is not feasible due to the natural or existing physical characteristics of the site;
 - (3) The location of the land development project in the watershed is such that on-site stormwater management will result in increased peak flows on the main stream where the stream channel is not adequate to handle the increased peak flows. However, management of the water quality volume shall still be required. The applicant or property owner must provide supporting hydrologic analysis in accordance with the stormwater management design manuals;
 - (4) An off-site stormwater management facility provides the required controls;
 - (5) An existing regional stormwater management facility provides the required controls, and the property owner agrees to a pro-rata share contribution, if applicable.

- (b) In instances where one of the conditions above, in §11A-10(a), applies, the applicant may apply for an exception to be relieved of strict compliance with the stormwater management provisions that are not achievable, provided that acceptable mitigation measures are taken. To be eligible for an exception, the applicant must demonstrate to the satisfaction of the County that the immediate downstream waterways will not be subject to:
 - (1) Deterioration of existing culverts, bridges, dams, and other structures;
 - (2) Deterioration of biological functions or habitat;
 - (3) Accelerated streambank or streambed erosion or siltation;
 - (4) Increased threat of flood damage to public health, life, and property.

Sec. 11A-11. Stream buffer requirement exceptions.

The following types of development shall not be required to retain, establish, or manage a stream buffer, provided that the requirements of Article IV General Criteria are satisfied:

- (a) The construction, installation, operation and maintenance of electric, gas and telephone transmission lines, railroads, and activities of the Virginia Department of Transportation, and their appurtenant structures, which are accomplished in compliance with the Erosion and Sediment Control Law or an erosion and sediment control plan approved by the Virginia Soil and Water Conservation Board.
- (b) The construction, installation, and maintenance by public agencies of water and sewer lines, including water and sewer lines constructed by private interests for dedication to public agencies, provided that:
 - (1) To the extent practical, the location of such water or sewer lines shall be outside of all stream buffer areas:
 - (2) No more land shall be disturbed than is necessary to construct, install and maintain the water or sewer lines; and
 - (3) All such construction, installation, and maintenance of such water or sewer lines shall comply with all applicable federal, state, and local requirements and permits, and be conducted in a manner that protects water quality.

ARTICLE III. STORMWATER MANAGEMENT PROGRAM PERMIT PROCEDURES AND REQUIREMENTS

No application for land disturbance will be approved unless it includes a stormwater management design plan as required by this chapter, detailing how runoff and associated water quality impacts resulting from the activity will be controlled or managed. A stormwater management plan shall consist of a concept plan, to ensure adequate planning for the management of runoff, and a design plan.

DIVISION 1. STORMWATER MANAGEMENT CONCEPT PLANS

Sec. 11A-12. Stormwater management concept plans.

- (a) All preliminary plans of subdivision and minor and major site plans shall provide a stormwater management concept plan describing, in general, how stormwater runoff through and from the development will be conveyed and controlled.
- (b) The stormwater management concept plan must be approved prior to submission of a stormwater management design plan (as part of the construction plans, final plan, or site plan) for the entire development, or portions thereof.
- (c) A copy of the approved stormwater management concept plan shall be submitted with the stormwater management design plan. The Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, shall check the design plan for consistency with the concept plan and may require a revised stormwater management concept plan if substantial changes in the site development proposal have been made.
- (d) The stormwater management concept plan shall utilize, to the maximum extent practicable, low-impact development (LID) site planning in accordance with the low-impact development design manuals. The maximum extent practicable shall be determined in a *LID Natural Resource Assessment* meeting with the Culpeper County Planning Department and/or the Culpeper Soil and Water Conservation District.
- (e) At a minimum, the stormwater management concept plan will include the *LID Natural Resource Assessment* and a plan view of the site providing all appropriate information as identified in the stormwater management design manuals, or suitable information as adopted by the Board of Supervisors of Culpeper County.
- (f) The stormwater management concept plan shall include a hydrologic/hydraulic analysis of the downstream watercourse for all concentrated surface waters that will be discharged from the project site. The Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, may request relocation of a stormwater outfall if other alternative discharge locations are practical.
- (g) Where the land-disturbing activity results from the construction of a single family residence, inclusive of the driveway accessing the site, an agreement in lieu of a plan may be substituted for a stormwater management concept plan.

DIVISION 2. STORMWATER MANAGEMENT DESIGN PLANS

Sec. 11A-13. Stormwater management design plans.

- (a) Except as provided for in Article II Exceptions, no grading or building permit shall be issued for land development without approval of a stormwater management design plan that demonstrates compliance with Article IV General Criteria.
- (b) The applicant shall demonstrate that the project meets the criteria set forth in this chapter through submission of a stormwater management design plan. Failure of the applicant to demonstrate that the project meets these criteria, as determined by the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, shall be reason to deny approval of the plan.
- (c) A stormwater management design plan containing all appropriate information as specified in §11A-14 shall be submitted to the Culpeper County Planning Department in conjunction with the construction plans, final plan, or site plan.
- (d) Where the land-disturbing activity results from the construction of a single family residence, inclusive of the driveway accessing the site, an agreement in lieu of a plan may be substituted for a stormwater management design plan.

Sec. 11A-14. Stormwater management design plan contents.

The stormwater management design plan shall contain maps, charts, graphs, tables, photographs, narrative descriptions, explanations, and citations to supporting references as appropriate to communicate the information required by this chapter, the stormwater management design manuals, and the low-impact development design manuals. At a minimum, the stormwater management design plan shall contain the following:

(a) General.

- (1) Description of the project and proposed design, including how water quality, quantity and stormwater drainage requirements will be addressed.
- (2) Proposed erosion and sediment controls, and proposed temporary and permanent stormwater management facilities.
- (3) Project schedule, including a sequence of construction.
- (4) Maps depicting all pertinent stormwater management information necessary for review of the plan as identified in the stormwater management design manuals, including, but not limited to maps of the drainage area, soils maps, and a plan view of the development project.
- (5) Identification of offsite easements required.

(b) Stormwater management facilities.

(1) Stormwater management facilities identified on a map, including details, plan, profile, cross sections, and other pertinent data necessary for review as identified in the stormwater management design manuals.

- (2) Comprehensive hydrologic and hydraulic design calculations, including all assumptions and criteria, for the pre-development and post-development conditions for the design storms specified in this chapter or the stormwater management design manuals.
- (3) If infiltration facilities are proposed, the location of existing and proposed wells and septic system drain fields shall be shown along with an analysis that supports the location of the infiltration facility in the soil type identified.
- (4) A geotechnical report with recommendations and earthwork specifications in accordance with requirements in the stormwater management design manuals. The geotechnical engineer shall certify on a specifications sheet in the design plan that the geotechnical recommendations have been incorporated into the design of stormwater management facilities.
- (5) A plan describing the woody and herbaceous vegetative stabilization and management techniques to be used within and adjacent to the stormwater management facility in accordance with standards in the stormwater management design manuals.
- (6) Identification of all onsite and offsite, temporary and permanent easements needed for construction, inspection, and maintenance of stormwater management facilities in accordance with specifications in the stormwater management design manuals.
- (7) A maintenance plan identifying the parts or components of the stormwater management facility that need to be maintained to ensure continued proper functioning of the facility. A maintenance agreement shall be executed between the responsible party and the Culpeper County Department of Planning.

(c) Low-impact development sites.

- (1) Integrated management practices identified on a map and corresponding design details in accordance with the low-impact development design manuals.
- (2) Hydrologic computations to determine low-impact development stormwater requirements in accordance with the low-impact development design manuals.
- (3) Hydrologic evaluation and design details for supplemental conventional stormwater management facilities in the event that integrated management practices alone cannot meet site stormwater management requirements.
- (4) Identification of all storm drainage easements needed to establish locations of integrated management practices.
- (5) Installation specifications for all integrated management practices.

(d) Stormwater drainage systems.

- (1) Hydrologic and hydraulic design calculations, including calculations for offsite drainage systems.
- (2) Design specifications in accordance with the stormwater management design manuals.
- (3) Identification of all easements needed for inspection and maintenance of drainage systems in accordance with specifications in the stormwater management design manuals.

(4) All existing and proposed drainage systems, natural or manmade, shall be analyzed according to the Virginia Erosion and Sediment Control Regulations Minimum Standard 19.

Sec. 11A-15. Stormwater management design plan approval.

- (a) A maximum of thirty (30) calendar days from the receipt of an application will be allowed for preliminary review of the application to determine if the application is complete. During this period, the application will be accepted for review, which will begin the sixty-day review period, or it will be rejected for incompleteness. If rejected, the applicant will be informed in writing of the information necessary to complete the application.
- (b) The sixty-day review period begins on the day the complete stormwater management design plan is accepted for review. During the sixty-day review period, the Zoning Administrator, or his designee, shall either approve or disapprove the plan and communicate the decision to the applicant in writing. Approval or denial shall be based on the plan's compliance with this chapter and the stormwater management design manuals. In cases where modifications are required to approve the plan, the County shall have an additional sixty (60) days to review the revised plan from the initial and any subsequent resubmission dates. If the plan is approved, one copy bearing certification of such approval shall be returned to the applicant. If the plan is rejected, the applicant shall be notified in writing of the reasons. A copy of the approved plan shall be kept on the project site.
- (c) All plans, profiles, and specifications shall be distributed to the appropriate County departments and/or State agencies for review and recommendation.
- (d) The applicant or any aggrieved party authorized by law may appeal the Zoning Administrator's decision of approval or disapproval of a stormwater management design plan application within thirty (30) days after rendering of such decision by the Zoning Administrator, to the Board of Supervisors.

Sec. 11A-16. Conditions of approval.

- (a) The applicant shall comply with all applicable requirements of the approved plan.
- (b) No substantive changes shall be made to an approved plan without review and written approval by the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies.
- (c) The stormwater management design plan's approval expires in one year from the date of approval unless a final plat is recorded or unless work has actually begun on the site. The recordation of a final plat for a section of a subdivision (or initiation of construction in a section) does not vest the approval of the stormwater management design plan for the remainder of the subdivision. If the stormwater management design plan expires, the applicant shall file with the Culpeper County Planning Department for reapproval of the stormwater management design plan.
- (d) Three (3) sets of certified as-built plans and one electronic copy on storage media acceptable to the County, meeting the specifications documented in the stormwater management design manuals, shall be submitted to the Zoning Administrator upon completion of the project. Each as-built plan shall have a certification statement by a professional licensed in Virginia to perform such work and provide photographic evidence that proper construction practices have been followed.
 - (e) The applicant shall be responsible for implementing the approved plan.

Sec. 11A-17. Fees.

Fees shall be paid to the County in accordance with the Culpeper County Fee Schedule to defray the cost of plan review, program administration, and necessary inspections.

ARTICLE IV. GENERAL CRITERIA

DIVISION 1. GENERAL PERFORMANCE CRITERIA

Sec. 11A-18. General performance criteria.

- (a) Incorporation on the site of best management practices shall meet the water quality protection requirements set forth in §11A-19 and §11A-20 or §11A-21. For the purposes of this chapter, the "site" may include multiple projects or properties that are adjacent to one another or lie within the same drainage area where a single best management practice will be utilized by those projects to satisfy stormwater quality protection requirements;
- (b) Any maintenance, alteration, use, or improvement to an existing structure that does not degrade the quality of surface water discharge, as determined by the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, may be exempted from the requirements of this article.
- (c) The Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, may authorize the developer to use retention and detention basins or alternative best management practice facilities to achieve the performance criteria set forth in this article.
- (d) The Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, may require evidence of all wetland and stream impact permits required by law prior to authorizing grading or other on-site activities.

DIVISION 2. WATER QUALITY

Sec. 11A-19. General water quality criteria.

Unless judged to be exempt according to the conditions found in Article II, the following criteria shall be addressed for stormwater management at all sites:

- (a) All stormwater runoff generated from land development and land use conversion activities shall not discharge untreated stormwater runoff directly into a jurisdictional wetland or local water body without adequate treatment. Where such discharges are proposed, the impact of the proposal on wetland functions shall be addressed using a method acceptable to the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies. In no case shall the impact on functions be any less than allowed by the United States Army Corp of Engineers or the Virginia Department of Environmental Quality.
- (b) Annual groundwater recharge rates shall be maintained by promoting infiltration through the use of structural and non-structural methods. At a minimum, annual recharge from the post development site shall mimic the annual recharge from pre-development site conditions.
- (c) Land development projects shall comply with the water quality performance-based or technology-based criteria in accordance with §11A-20 and §11A-21.
- (d) Stormwater discharges to critical areas with sensitive resources may be subject to additional criteria, or may need to utilize or restrict certain stormwater management practices at the discretion of Culpeper County. Prior to design, applicants are required to consult with the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other

agencies, to determine if they are subject to additional stormwater design requirements. Groundwater protection areas around public water supplies, if established, shall be subject to additional criteria.

(e) Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as "hotspots", may require the use of specific structural BMPs and pollution prevention practices.

Sec. 11A-20. Performance-based water quality criteria.

For land development, the calculated post-development non-point source pollutant runoff load shall be compared to the calculated pre-development load based upon the average land cover condition or the existing site condition. A BMP will be located, designed, and maintained to achieve the target pollutant removal efficiencies specified in Table 1 to effectively reduce the pollutant load to the required level based upon the following four applicable land development situations for which the performance criteria apply:

- (a) Situation 1 consists of land development where the existing percent impervious cover is less than or equal to the average land cover condition and the proposed improvements will create a total percent impervious cover which is less than the average land cover condition.
- Requirement: No reduction in the after development pollutant discharge is required.
- (b) Situation 2 consists of land development where the existing percent impervious cover is less than or equal to the average land cover condition and the proposed improvements will create a total percent impervious cover which is greater than the average land cover condition.

Requirement: The pollutant discharge after development shall not exceed the existing pollutant discharge based on the average land cover condition.

- (c) Situation 3 consists of land development where the existing percent impervious cover is greater than the average land cover condition.
- *Requirement:* The pollutant discharge after development shall not exceed 1) the pollutant discharge based on existing conditions less 10% or 2) the pollutant discharge based on the average land cover condition, whichever is greater.
- (d) Situation 4 consists of land development where the existing percent impervious cover is served by an existing stormwater management BMP that addresses water quality.

Requirement: The pollutant discharge after development shall not exceed the existing pollutant discharge based on the existing percent impervious cover while served by the existing BMP. The existing BMP shall be shown to have been designed and constructed in accordance with proper design standards and specifications, and to be in proper functioning condition.

Sec. 11A-21. Technology-based water quality criteria.

For land development, the post-developed stormwater runoff from the impervious cover shall be treated by an appropriate BMP as required by the post-developed condition percent impervious cover as specified in Table 1. The selected BMP shall be located, designed, and maintained to perform at the target pollutant removal efficiency specified in Table 1. Design standards and specifications for the BMPs in Table 1 which meet the required target pollutant removal efficiency shall be consistent with those provided in the Virginia Stormwater Management Handbook.

Table 1.

Water Quality BMP*	Target Phosphorous Removal Efficiency	Percent Impervious Cover
Vegetated filter strip	10%	16-21%
Grassed swale	15%	16-21%
Constructed wetlands	20%	22-37%
Extended detention (2x WQ Vol)	35%	22-37%
Retention basin I (3 x WQ Vol)	40%	22-37%
Bioretention basin	50%	38-66%
Bioretention filter	50%	38-66%
Extended detention-Enhanced	50%	38-66%
Retention basin II (4 x WQ Vol)	50%	38-66%
Infiltration (1 x WQ Vol)	50%	38-66%
Sand filter	65%	67-100%
Infiltration (2 x WQ Vol)	65%	67-100%
Retention basin III (4 x WQ Vol with aquatic bench)	65%	67-100%

^{*}Innovative or alternative BMPs not included in this table may be allowed at the discretion of the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies.

DIVISION 3. WATER QUANTITY

Sec. 11A-22. Technical water quantity criteria.

In order to protect Culpeper County waters from the potential harms of unmanaged quantities of stormwater runoff (sediment deposition, erosion, and damage due to changes in runoff rate of flow and hydrologic characteristics, including but not limited to, changes in volume, velocity, frequency, duration, and peak flow rate of stormwater runoff), the following technical criteria and standards for stormwater management apply to land disturbing activities:

- (a) Maintain post-development runoff rate of flow and runoff characteristics that replicate as nearly as practicable, the existing predevelopment runoff characteristics and site hydrology,
- (b) Properties and receiving waterways downstream of any land development project shall be protected from erosion and damage due to increases in volume, velocity and frequency of peak flow rate of stormwater runoff in accordance with the Virginia Erosion and Sediment Control Law and/or Culpeper County Code Chapter 8 Erosion and Sediment Control.
- (c) The Culpeper County Planning Department, in consultation with the Soil and Water Conservation District and/or other agencies, may determine that some watersheds or receiving stream systems require enhanced criteria in order to address the increased frequency of bankfull flow conditions brought on by land development projects. Therefore, in lieu of the reduction of the 2-year post-developed peak rate of runoff, the land development project being considered shall provide 24- hour extended detention of the runoff generated by the 1-year, 24- hour duration storm.
- (d) The 10-year post-developed peak rate of runoff from the development site shall not exceed the 10-year pre-developed peak rate of runoff.

Sec. 11A-23. Water quantity criteria compliance.

Compliance with §11A-22 will be determined with use of the following:

- (a) Physical surveys and calculations consistent with engineering practices acceptable to the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, to verify pre-development stream characteristics.
- (b) Calculations for each point of discharge from the land disturbance to evaluate flooding and channel erosion impacts to receiving streams due to land-disturbing activities. Calculations will include any runoff from the balance of the watershed which also contributes to that point of discharge. Flooding and channel erosion impacts shall be evaluated taking the entire upstream watershed into account, including the modifications from the planned land disturbance. Good engineering practices and calculations shall be used to demonstrate post development stream characteristics, flooding, and channel erosion impacts.
- (c) For purposes of computing predevelopment runoff, all pervious lands in the site shall be assumed prior to development to be in good condition (if the lands are pastures, lawns, or parks), with good cover (if the lands are woods), or with conservation treatment (if the lands are cultivated); regardless of conditions existing at the time of computation. Predevelopment runoff calculations utilizing other land cover values may be utilized provided that it is satisfactorily demonstrated that actual site conditions warrant such considerations.

Sec. 11A-24. Stream channel erosion.

Any land-disturbing activity that provides for stormwater management intended to address any flow rate capacity and velocity requirements for natural or manmade channels shall be deemed to satisfy the requirements for natural or manmade channels if the practices are designed to (i) detain the water quality volume and to release it over 48 hours; (ii) detain and release over a 24-hour period the expected rainfall resulting from the one year, 24-hour storm; and (iii) reduce the allowable peak flow rate resulting from the 1.5, 2, and 10-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site, assuming the site was in a good forested condition. "Good forested condition" is achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition. In such instances, the land-disturbing activity shall be exempt from any flow rate capacity and velocity requirements for natural or manmade channels as defined in any regulations promulgated pursuant to § 10.1-562 or 10.1-570 of Virginia Erosion and Sediment Control Law, Title 10.1, Chapter 5, Article 4 (July 2006).

DIVISION 4. DESIGN STORM FREQUENCY

Sec. 11A-25. Design storm frequency.

The specified design storms shall be defined as 2- and 10-year 24-hour duration storms using the site specific rainfall distribution recommended by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). Use of Modified Rational Method is also permissible per the guidance provided in the Virginia Stormwater Management Handbook.

DIVISION 5. STRUCTURES OR FACILITIES

Sec. 11A-26. Stormwater management impoundment structures or facilities.

- (a) Construction of stormwater management impoundment structures or facilities within wetlands and perennial streams will be avoided to the maximum extent practicable.
- (b) Construction of stormwater management impoundment structures or facilities within a Federal Emergency Management Agency (FEMA) designated 100-year floodplain will be avoided to the maximum extent practicable. When this is demonstrated to be unavoidable, all stormwater management facility construction will be in compliance with all applicable requirements under the National Flood Insurance Program, 44 CFR Part 59 and local floodplain ordinances.
- (c) Stormwater management impoundment structures that are not covered by the Impounding Structure Regulations (4VAC50-20) will be engineered for structural integrity for the 100-year storm event. In no case will the design standard be less than the 100-year storm event for any stormwater management impoundment structure.
- (d) No adverse environmental impacts shall occur to any identified fractured bedrock. Permanent stormwater management impoundment structures or facilities shall only be constructed in fractured bedrock after completion of a geotechnical investigation in accordance with guidelines outlined in the Virginia Stormwater Management Handbook. Discharge of stormwater into fractured bedrock shall not occur unless in accordance with the technical criteria setout in this Article, unless otherwise allowed by law.

Sec. 11A-27. Regional (watershed-wide) stormwater management facilities.

The Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies may encourage the development of regional stormwater management plans. Land owners intending to develop large tracts of land are encouraged to develop regional plans where practical. The objective of a regional stormwater management plan is to address the stormwater management concerns in a given watershed with greater economy and efficiency by installing regional stormwater management facilities versus individual, site-specific facilities. The result will be fewer stormwater management facilities to design, build and maintain in the affected watershed.

DIVISION 6. STREAM BUFFERS

Sec. 11A-28. General stream buffer criteria.

For all development subject to this chapter, stream buffers shall be retained if present and established where they do not exist on any lands containing streams, and/or wetlands contiguous to these streams.

- (a) The stream buffer shall be no less than one hundred (100) feet on each side of the Rappahannock, Rapidan, Hazel, and Thornton Rivers, no less than fifty (50) feet wide on each side of perennial streams, no less than twenty-five (25) feet on each side of ephemeral streams, intermittent streams, or streams with evidence of channel formation.
- (b) Buffers shall be measured horizontally from the top of the stream bank if no wetlands exist and from the edge of contiguous wetlands.
- (c) Each stream buffer shall be maintained and incorporated into the design of the land development to the fullest extent possible.

(d) Except for the activities pertaining to the management of a stream buffer identified in Article III Exceptions and the additional types of development which may be allowed in a stream buffer identified in §11A-27, no indigenous vegetation within the stream buffer shall be disturbed or removed, regardless of the size of the area affected.

Sec. 11A-29. Stream buffer development exceptions.

If otherwise authorized by the applicable regulations of zoning ordinances, the following types of development shall be allowed in a stream buffer, provided that the requirements of §11A-26 are satisfied:

- (a) A building or structure which existed on the date of adoption of this chapter may continue at such location. However, nothing in this chapter authorizes the replacement, expansion or enlargement of such building or structure except as provided.
- (b) On-site or regional stormwater management facilities and temporary erosion and sediment control measures such as a silt fences or super silt fence, provided that:
 - (1) Selected erosion and sediment measures do not harm the natural infiltration of the buffer and land disturbance is minimized.
 - (2) To the extent practical, as determined by the Zoning Administrator, the location of such facilities shall be outside of the stream buffer;
 - (3) No more land shall be disturbed than is necessary to provide for construction and maintenance of the facility, as determined by the Zoning Administrator;
 - (4) The facilities are designed and constructed so as to minimize impacts to the functional value of the stream buffer and to protect water quality; and
 - (5) Facilities located within a flood plain adhere to the flood plain regulations of Culpeper County and are designed and located, to the extent practical, to maintain their water quality and/or water quality control value, according the standards of this chapter, during flood conditions.
- (c) Water-dependent facilities; water wells, passive recreation access, such as pedestrian trails and bicycle paths; historic preservation; archaeological activities; provided that all applicable federal, state and local permits are obtained.
 - (d) Development which will consist of a lake, pond, or ecological/wetland restoration project.
- (e) Development which will consist of the construction and maintenance of a driveway or roadway, and the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, determines that the stream buffer would prohibit reasonable access to a portion of the lot which is necessary for the owner to have a reasonable use of the lot;
- (f) Development on a lot which was of record prior to the date of adoption of this chapter, on which the development in the stream buffer will consist of the construction, installation and maintenance of water and sewer facilities or sewage disposal systems, and the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, determines that the stream buffer would prohibit the practicable development of such facilities or systems. Any such sewage disposal system must comply with all applicable state laws;

- (g) Development on a lot which was of record prior to the date of adoption of this chapter, if the stream buffer would result in the loss of a building site, and there are no other available building sites outside the stream buffer on the lot, as determined by the Zoning Administrator.
- (h) Road crossings and utility crossings; provided that crossings to the extent practicable are located at a site of minimum impact to buffers, preferably crossing at a 90 degree angle.

DIVISION 7. LOW-IMPACT DEVELOPMENT

Sec. 11A-30. Low-impact development criteria.

The use of low-impact development site planning and integrated management practices shall be evaluated as the first option to control stormwater runoff at the source and more closely approximate predevelopment runoff conditions. Low-impact development site design is intended to maximize conservation of open space, minimize impervious area, and manage the increase in runoff volume through filters and infiltration practices while complying with the requirements for stormwater management and peak flow rate attenuation set forth by the State and Culpeper County.

- (a) Stormwater management design plans developed consistent with the requirements of this section shall satisfy the water quality and quantity performance criteria of §11A-19 through §11A-23.
- (b) The methodology, design criteria, hydrologic analysis, and computational procedures for low-impact development stormwater management shall be those of the County approved LID manuals.
- (c) Stormwater management design plans utilizing LID methodology shall not conflict with existing State or Culpeper County laws, ordinances, regulations or policies.
- (d) Storm drainage easements shall be recorded to identify the locations of integrated management practices on lots or parcels. The property owner shall not remove or structurally alter integrated management practices without prior written approval from the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies.
- (e) Stormwater management design plans shall be considered LID only if one or more of the following non-structural practices, and one or more of the following structural practices are both incorporated into the site design:
 - (1) Non-structural practices:
 - (i) Conservation of open space area in excess of zoning requirements
 - (ii) Reduction of impervious area through the use of clustering provisions (refer to Culpeper County Code, Appendix A: Zoning Ordinance, Section 9-5.)
 - (iii) Reduction of impervious area through alternative road design practices that are acceptable to VDOT and Emergency Management Services.
 - (iv) Buffer improvement and enlargement beyond requirements.
 - (v) Additional practices, as specified in County approved LID manuals.

- (2) Structural practices:
 - (i) Stormwater runoff from parking lots may utilize stormwater management infiltration facilities and/or stormwater management filtering systems place within or near parking lot islands.
 - (ii) Integrated management practices to manage and reduce runoff volume on residential lots. Lots ½ acre or larger are permitted to have on-lot measures; for lots ½ acre or smaller, off-lot measures in common areas is encouraged.
 - (iii) Extended detention and conventional detention methods to meet State and Culpeper County standards of peak flow rate attenuation.
 - (iv) Utilization of flow dissipation and disconnection structures to reduce impact of concentrated flows.
 - (v) Additional practices, as specified in County approved LID manuals.

ARTICLE V. CONSTRUCTION INSPECTION

Stormwater management construction inspection shall utilize the final approved plans prepared in accordance with Article III: Stormwater Management Program Procedures and Requirements. In addition, the inspection shall comply with the latest version of the Erosion and Sediment Control Regulations, promulgated pursuant to Section 4 (10.1-566), Chapter 5 of Title 10.1 of the Code of Virginia.

Sec. 11A-31. Inspections.

Prior to the issuance of any permits, the Zoning Administrator shall require the owner to submit a reasonable performance bond with surety, cash escrow, letter of credit, or any combination thereof to ensure that action can be taken by the Zoning Administrator, at the applicant's expense, should the applicant fail, after proper notice and within the time specified, to initiate or maintain those measures identified in the approved stormwater management design plan. The performance bond or other surety shall be provided from a date prior to the issuance of any permit until after the requirements of the approved stormwater management/BMP plan have been completed including as-built plans as outlined in §11A-32, as determined by the Zoning Administrator. A final inspection, of all aspects outlined in the As-Built checklist, by the Culpeper County Planning Department or its designee is required before the release of any performance securities can occur.

- (a) A preconstruction conference between the Culpeper County Planning Department and/or the Culpeper Soil and Water Conservation District, the applicant, and the person(s) performing the work shall be required.
- (b) Periodic inspections of the stormwater management system construction shall be conducted by the staff of the Culpeper County Planning Department or their designated agent. If any violations are found, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. No additional work shall proceed until any violations are corrected and all work previously completed has received approval by the Culpeper County Planning Department.
- (c) If determined by the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, that there is a failure to comply with the plan, a written notice to comply shall be served upon the permittee or person responsible for carrying out the plan in accordance with Article VII Enforcement and Penalties of this chapter.
- (d) Inspections during construction activity will be in accordance with Virginia Erosion and Sediment Control Regulation VAC50-30-60B or, if approved, with an alternative inspection program.
- (e) Upon completion, the applicant is responsible for certifying that the completed project is in accordance with the approved plans and specifications (refer to the As-built checklist) and shall provide regular inspections sufficient to adequately document compliance. All inspections shall be documented and written reports prepared that contain the following information:
 - (1) The date and location of the inspection;
 - (2) Whether construction is in compliance with the approved stormwater management plan;
 - (3) Variations from the approved construction specifications; and
 - (4) Any violations that exist.

All such reports shall be submitted to the Culpeper County Planning Department.

Sec. 11A-32. Post-construction final inspection and as-built plans.

All applicants are required to submit as-built plans for any stormwater management practices located on-site after final construction is completed, in accordance with the As-Built Checklist. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.

ARTICLE VI. POST CONSTRUCTION MAINTAINENCE, INSPECTION, AND REPAIR OF STORMWATER FACILITIES

Sec. 11A-33. Maintenance of stormwater facilities.

- (a) Responsibility for the operation and maintenance of the stormwater management facilities and storm drainage system shall remain with the property owner or an owner's association. All maintenance activities shall be in accordance with standard maintenance practices for stormwater management facilities and the stormwater management design manuals.
- (b) If an approved stormwater management design plan requires structural or nonstructural measures, the owner shall execute a stormwater management facilities maintenance agreement and plan prior to the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, granting final approval for any development for which a permit is required. The agreement shall be recorded with the Clerk of the Circuit Court of Culpeper County prior to land disturbance activity.
- (c) The stormwater management facilities maintenance agreement shall be in a form approved by the county attorney and shall at a minimum:
 - (1) Designate for the land development the owner, governmental agency, or other legally established entity which shall be permanently responsible for maintenance of the structural or non-structural measures required by the plan;
 - (2) Pass the responsibility for such maintenance to successors in title; and
 - (3) Ensure the continued performance of the maintenance obligations required by the plan and this article.
 - (4) Allow for right-of-entry by Culpeper County for inspection purposes, and for conveyance of easements to the County upon County request.

Sec. 11A-34. Inspections of stormwater facilities.

- (a) To ensure proper performance of the stormwater facility, the property owner or owner's association is responsible for inspecting and performing all necessary maintenance and repairs to the stormwater management facility in accordance with the approved maintenance plan and the stormwater management design manuals as specified in the stormwater management facilities maintenance agreement. The responsible party shall keep written records of inspections and maintenance/repairs and make them available to the county upon request.
- (b) The Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, shall be allowed, after giving notice to the owner, occupier, or operator of the land development, to conduct any inspection required by this chapter. The notice may be either verbal or in writing. Notice shall not be required if Culpeper County or its agents have entered into a right of entry agreement or if the owner has granted to the County an easement for purposes of inspection and maintenance.

ARTICLE VII. ENFORCEMENT AND PENALTIES

Sec. 11A-35. General procedures.

Upon determination by the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, that the owner has failed to comply with the approved stormwater management plan the following procedures shall apply:

- (a) The Zoning Administrator shall serve upon the owner a written notice to comply. The notice shall be served by registered or certified mail and/or by delivery to the land development site. The notice shall specify the measures needed to comply with the plan and shall specify the time within such measures shall be completed.
- (b) If the owner fails to take the corrective measures stated in the notice to comply within the time specified in the notice any grading, building or other permit for activities involving the land development may be revoked and the owner shall be deemed to be in violation of this chapter.
- (c) If the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, determines, upon completion of a maintenance inspection, that maintenance or repair of the measures is neglected, or that any stormwater management facility is a danger to public health or safety, the County may perform the work necessary to assure that such measures or facilities are not a danger to public health or safety, and shall be entitled to recover the costs of such work from the owner.

Sec. 11A-36. Violations.

Any development activity that is commenced or is conducted contrary to this chapter or the approved plans and permit may be subject to the enforcement actions outlined in this article and the Virginia Stormwater Management Law.

Sec. 11A-37. Stop work orders.

Persons receiving a stop work order will be required to halt all construction activities. This stop work order will be in effect until the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, confirms that the development activity is in compliance and the violation has been satisfactorily addressed. Upon failure to comply within the time specified, the permit may be revoked and the penalties in §11A-36 enforced.

Sec. 11A-38. Civil and criminal penalties.

Any person who violates any provision of a local ordinance or program adopted pursuant to the authority of this chapter shall be guilty of a Class 1 misdemeanor and shall be subject to a fine not exceeding \$1,000 or up to thirty days imprisonment for each violation or both. In addition, the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, may pursue the following actions:

- (a) Apply to the circuit court to enjoin a violation or a threatened violation of the provisions of this chapter without the necessity of showing that an adequate remedy at law does exist.
- (b) Without limiting the remedies which may be obtained in this article, may bring a civil action against any person for violation of this ordinance or any condition of a permit. The action may seek the imposition of a civil penalty of not more than \$2,000 against the person for each violation.

(c) The Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, may provide and issue an order against any person who has violated or failed, neglected or refused to obey this chapter or any conditions of a permit, for the payment of civil charges for violations in specific sums, not to exceed the limit specified in §11A-38(b).

Sec. 11A-39. Restoration of lands.

Any violator may be required to restore land to its undisturbed condition or in accordance with a Notice of Violation, Stop Work Order, or Permit requirements. In the event that restoration is not undertaken within a reasonable time after notice, the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies, may take necessary corrective action, the cost of which shall be covered by the performance bond, and/or become a lien upon the property until paid.

Sec. 11A-40. Holds on certificates of occupancy.

Certificates of occupancy shall not be granted until corrections to all stormwater practices have been made in accordance with the approved plans, Notice of Violation, Stop Work Order, or Permit requirements, and accepted by the Culpeper County Planning Department, in consultation with the Culpeper Soil and Water Conservation District and/or other agencies.